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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/642,612	08/17/2000	Tatsuya Watanuki	16869P-010600US	6926

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TOWNSEND AND TOWNSEND AND CREW, LLP
TWO EMBARCADERO CENTER
EIGHTH FLOOR
SAN FRANCISCO, CA 94111-3834

EXAMINER

TON, ANTHONY T

ART UNIT	PAPER NUMBER
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2661

7

DATE MAILED: 12/18/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

TS

Office Action Summary

Application No.

09/642,612

Applicant(s)

WATANUKI ET AL.

Examiner

Anthony T Ton

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 August 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-55 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-55 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 August 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4 and 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Drawing Objections

1. The drawings are objected to because of the following minor informalities:

a) **Figure 1:** Reference term "**LAN-To-LAN Forwarding Device A**" is missing in the first box of the LAN-To-LAN Forwarding Devices 30.

b) **Figure 5:** On step 201, a question mark "?" should be added at the end of term "Is received packet present".

c) **Figure 7:** On step 301, a question mark "?" should be added at the end of term "Is transmission packet present".

d) **Figure 12:** On step 601, a question mark "?" should be added at the end of term "Is failure detected on LAN line having a Mode Flag = "Primary"".

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification Objections

2. The disclosure is objected to because of the following minor informalities:

a) **Page 1:** A title and a statement of the **Field of Invention**, to which the invention pertains, should be provided clearly and separately from the section of Background of the Invention.

b) **Page 13** line 25, term "**in Fig. 10**" should be changed to "**in Fig. 9**" since the "a receiving line switching unit 50" has been cited in Figure 9 only.

Appropriate correction is required.

Claim Objections

3. Claims **7, 10, 21, 28, 30-33** and **35-38** are objected to because of the following informalities:

a) Claim **7** line 4: It is suggested to change term "protocol layer" to "network layer" to be correct with the third layer of an OSI reference model.

b) Claim **10** line 4: It is suggested to change term "storage; and thereupon" to ""storage; thereupon" to comply with the term "packets; and deletes" in the same line.

c) Claim **21** recites the limitation "received packets" in line 6. Are these "received packets" different from "said received packets" and "reception of packets" cited in lines 3 and 2 respectively?

d) Claim **21** line 5: It is suggested to change term "conditioned upon" to "conditioning upon" to be consistent with the form of "confirming" and "storing" cited in lines 2 and 3 respectively.

e) Claim **28** line 5: It is suggested to change term "unique each packet" to "unique to each packet" to be more clearly.

f) Claims **30-33** and **35-38** line 2: It is suggested to change term "an FCS" to "a FCS".

Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

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5. Claim 4 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 4 recites the limitation "said packets" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-5, 7, 42, 43, 45, 49, 50 and 52 are rejected under 35 U.S.C. 102(b) as being anticipated by Yukie (JP-09,326,783 cited in IDS #4).

a) Regarding to Claims 1-5 and 7: Yukie teaches all claimed limitation as an explain below:

Yukie discloses a data communications system that connects a data circuit change control unit 1 to a data circuit change control unit 2. In which, data with an error detection signal added thereto (as added a unique identifier information 40 to each packet 41 cited by the claimed limitation) by an error detection signal provision section 102 (as a line controller 21 cited by the claimed limitation) are simultaneously outputted (as substantially contemporaneously transmitting a plurality of copies of packets cited by the claimed limitation) from an active transmission section 103 and a preliminary

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transmission section 113 (as a line transmitting unit 22 cited by the claimed limitation) at the transmitting side of a data circuit change control unit 1. Wherein at the receiving side of a data circuit change control unit 2, reception sections 221 and 231 receive signals from both lines (as a line receiver unit 23 connected by a plurality of physical lines cited by the claimed limitation), and error detection sections 222, 232 detect an error. The result of detection is informed to an information processing section 101 (as a protocol processor 24 or repeating processor 25 that processes packets in accordance with at least a third layer of an OSI reference cited by the claimed limitation). Upon the receipt of the notice of presence of an error in active data, the information processing 101 allows a changeover section 223 to select a preliminary line, which is connected to the preliminary transmission section 113 for the reception. Thus, the preliminary line with a predetermined time delay receives the same data as the data whose error was just detected in the active line (for more details, see abstract, Drawing 1, and detailed description).

b) Regarding to Claims **42, 43** and **45**: The rejection of Claims, 4, 5 and 7 would apply to the claims 42, 43 and 45, respectively, in a computer data signal embodied in transmission medium comprising the code as taught.

c) Regarding to Claims **49, 50** and **52**: The rejection of Claims, 4, 5 and 7 would apply to the claims 49, 50 and 52, respectively, in a computer program product for transmitting packets comprising the code as taught.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims **8, 9, 26, 27** and **41** are rejected under 35 U.S.C. 103(a) as being unpatentable over Yukie (JP-09,326,783 cited in IDS #4).

a) Regarding to Claims **8** and **9**: Yukie did not explicitly disclose a packet information storage, which causes to store identifier information of received packets when said identifier information of said received packets has not been stored therein. However, Yukie discloses an information processing section 101 and a change section 223; the section 101 outputs a control signal S25, an information signal, etc. as a transmit data signal S1 in each frame, in the mean time the section 223 receives a change control signal S25 from the section 101 to select the preliminary line for the reception then outputs the non-error data S28 to the information processing section 101. It is inherent that Yukie teaches all claimed limitations except for such an above discussion. However, in the combination of the sections 101 and 223, it would have been obvious to one of ordinary skill in the art can provide such a packet information storage of Yukie, as taught by the Applicant since such a storage is old and well known in the environment of the invention and would make Yukie more efficient.

b) Regarding to Claims **26** and **27**: All the claimed limitations of this claim have been covered by the Claims 1-5, 7 and 8 as discussion above as an apparatus for transmitting and receiving packets as taught.

c) Regarding to Claim **41**: All claimed limitations of this same as the last two parts of claim 26 (a packet information storage --- therein). Therefore, the claim 41 would be rejected as that of the claim 26 in a receiving apparatus for receiving packets from another apparatus through a plurality of physical lines as taught.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skilled in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims **6**, **44** and **51** are rejected under 35 U.S.C. 103(a) as being unpatentable over Yukie (JP-09,326,783 cited in IDS #4) in view of 3Com Corporation (High Availability and Scalability in the Network Core in the development of MultiPoint Link Aggregation (MPLA) Technology cited in IDS #4).

a) Regarding to Claim **6**: Yukie did not clearly disclose the step of substantially contemporaneously transmitting the plurality of copies of the plurality of packets to the plurality of physical lines in accordance with a second layer (data link layer) of an OSI reference model. However, Yukie does disclose a plurality of physical lines connected

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between the control units 1 and 2 (see Drawing 1). Thus, it's inherent that Yukie only fails to teach the physical lines in accordance with a second layer (data link layer) of an OSI reference model. 3Com Corporation does teach such physical lines in accordance with a second layer of the OSI reference model (see Fig.2). Therefore, it would have been obvious to one of ordinary skilled in the art to provide such physical lines in accordance with a second layer of the OSI reference model of Yukie, as taught by 3Com Corporation in order to provide a procedure as well as a protocol for operating communications lines, and detect message error for correction.

b) Regarding to Claim **44**: The rejection of Claim 6 would apply to the claim 44 in a computer data signal embodied in transmission medium comprising the code as taught.

b) Regarding to Claim **51**: The rejection of Claim 6 would apply to the claim 51 in a computer program product for transmitting packets comprising the code as taught.

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skilled in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims **10-13** are rejected under 35 U.S.C. 103(a) as being unpatentable over Yukie (JP-09,326,783 cited in IDS #4) in view of 3Com Corporation (High Availability

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and Scalability in the Network Core in the development of MultiPoint Link Aggregation (MPLA) Technology cited in IDS #4) as applied to claims 1-9 above, and further in view of Kamm et al. (US 5,457,680)

a) Regarding to Claims **10-12**: Yukie fails to disclose the step of deleting the identification information (ID) of received packets after forwarding said received packets. Kamm et al. teach such a deletion of the ID (see col.9 lines 54-57). Therefore, it would have been obvious to one of ordinary skilled in the art can provide such a deletion of the ID of Yukie, as taught by Kamm et al. in order to save room for a memory so that received packets can be processed and forwarded more faster.

b) Regarding to Claim **13**: The claimed limitations disclosed in the claims 8 and 10 are the same as that in the Claim 13. Therefore, Yukie would apply the rejections in the claims 8 and 10 to the claim 13 in a method for receiving packets as taught.

Claim Rejections - 35 USC § 103

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skilled in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. Claims **14, 15, and 18-20** are rejected under 35 U.S.C. 103(a) as being unpatentable over Yukie (JP-09,326,783 cited in IDS #4) in view of Bare (US 6,456,597)

a) Regarding to Claim 14: Yukie did not clearly disclose a plurality of mode flags, each mode flag associated with one of a plurality of physical lines, and for respectively storing either a primary or a secondary mode therein. However, Yukie discloses received sections 221 and 231 connected to error detection sections 222 and 232, respectively to detect data packet errors; to which, data packets S5 (as the primary mode cited by the claimed limitation) and S4 (as the secondary mode cited by the claimed limitation) transmitted from an active transmission section 103 and a preliminary transmission section 113 respectively to the received sections 221 and 231 respectively. Furthermore, when detected an error from the received packets, the error detection sections 222 and 232 outputted error existence signals S23 and S24 to the information processing section 101, respectively. Thus, Yukie only fails to teach a plurality of mode flags that respectively storing either a primary or a secondary mode. Bare does teach such a plurality of mode flags that respectively storing either a primary or a secondary mode (see col.14 lines 54-64). Therefore, it would have been obvious to one of ordinary skilled in the art to provide such a plurality of mode flags of Yukie, as taught by Bare in order to control data packet flow as well as detect message error for updating path information and choosing an alternate path in response to a failure.

b) Regarding to Claim 15: See the discussion in the Claims 1 and 2.

c) Regarding to Claims 18-20: Yukie did not clearly disclose when a failure is detected, changes one of plurality of mode flags storing the primary mode therein to a secondary mode, and changes another of said plurality of mode flags storing a secondary mode therein to a primary mode. However, when detected an error from the

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received packets, the error detection sections 222 and 232 outputted error existence signals S23 and S24 to the information processing section 101, respectively. Then the section 101 outputs the control signal S25 to the change section 223, and thereafter accepts the reception of S26 transmitted from the preliminary 232 and outputs the reception as S28 to the section 101 (see Drawing 1). Thus, it's inherent that Yukie teaches changes one of plurality of mode flags storing the primary mode therein to a secondary mode, and changes another of said plurality of mode flags storing a secondary mode therein to a primary mode except for a difference as described above in the Claim 14 (for more details of the claimed limitation, see detailed description and Drawing 3).

Claim Rejections - 35 USC § 103

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skilled in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

17. Claims **16, 17, 28, 29** and **40** are rejected under 35 U.S.C. 103(a) as being unpatentable over Yukie (JP-09,326,783 cited in IDS #4) and Bare (US 6,456,597) as applied to claims 14, 15 and 18-20 above, and further in view of Drott et al. (US 6,181,704).

a) Regarding to Claim **16**: Yukie and Bare fail to teach each of a plurality of line receivers abandons received packets if a mode flag corresponding to said at least one of said plurality of line receivers has a secondary mode stored therein. Drott et al. do teach such abandoned packets (see abstract and col.8 lines 45-50). Therefore, it would have been obvious to one of ordinary skill in the art to implement such each of a plurality of line receivers abandons received packets if a mode flag corresponding to said at least one of said plurality of line receivers has a secondary mode stored therein of Yukie, as taught by Drott et al. in order to provide improved reliability, accuracy and a packet delivery latency.

b) Regarding to Claim **17**: See the discussion in the Claims 1 and 7.

c) Regarding to Claim **28**: First two parts (a line controller --- physical lines;), second two parts (mode flags ---- a primary mode therein,), and the last part (said line receivers ---- mode therein.) of the claimed limitations of this claim have been covered by claim 1, claim 14, and claim 16 respectively. Therefore, the claim 28 would be rejected as such claims in a transmitting and receiving apparatus for exchanging packets as taught.

d) Regarding to Claim **29**: The same as the rejection on the claim 17.

e) Regarding to Claim **40**: All claimed limitations of this same as the second part of claim 28 (a line transmitting unit --- physical lines). Therefore, the claim 40 would be rejected as that of the claim 28 in a transmitting apparatus for transmitting packets to another apparatus through a plurality of physical lines as taught.

Claim Rejections - 35 USC § 102

18. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

19. Claims **21, 46** and **53** are rejected under 35 U.S.C. 102(b) as being anticipated by Keiichi et al. (JP-08,149,114 cited in IDS #4).

a) Regarding to Claim **21**: Keiichi et al disclose a technique that outputted data are stored in memories and error detection circuits to detect an error of the stored data, comprising:

Confirming reception of packets from a plurality of physical lines (see supervisor circuits 9 and 91, link lines 3 and 31, and their detailed description);

Storing said received packets in a received packet storage area provided in association with each of said plurality of physical lines, respectively (see memories 8 and 81 and their detailed description); and

Conditioned upon a mode flag associated with one of said plurality of physical lines storing a primary mode, delivering received packets to a protocol processor for effecting a protocol process (see boxes 8, 9 and 10, and selector 20 in Drawing 1; and their detailed description).

b) Regarding to Claim **46**: The rejection of Claim 21 would apply to the claim 46 in a computer data signal embodied in transmission medium comprising the code as taught.

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c) Regarding to Claim **53**: Basically, the claimed limitations of the claim 21 are the same as that of the claim 53, except for a computer readable storage medium for holding codes. However, this exception is well known in the art of the invention. Therefore, the rejection of Claim 21 would apply to the claim 53 in a computer program product for transmitting packets comprising the code as taught

Claim Rejections - 35 USC § 103

20. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skilled in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

21. Claims **22, 24, 47** and **54** are rejected under 35 U.S.C. 103(a) as being unpatentable over Keiichi et al. (JP-08,149,114) in view of Drott et al. (US 6,181,704).

a) Regarding to Claim **22**: Keiichi et al. fail to teach a step of when a mode flag associated with one of a plurality of physical lines stores a secondary mode therein, abandoning said received packet. Drott et al. do teach such a step (see discussion in the Claim 16 above)

b) Regarding to Claim **24**: All the claimed limitations of this claim have been covered by the Claims 21 and 22 as discussion above as a packet receiving method as taught.

c) Regarding to Claim **47**: The rejection of Claim 22 would apply to the claim 47 in a computer data signal embodied in transmission medium comprising the code as taught.

d) Regarding to Claim **54**: Basically, the claimed limitations of the claim 22 are the same as that of the claim 54, except for a computer readable storage medium for holding codes. However, this exception is well known in the art of the invention. Therefore, the rejection of Claim 22 would apply to the claim 54 in a computer program product for transmitting packets comprising the code as taught

Claim Rejections - 35 USC § 103

22. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skilled in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

23. Claims **23, 25, 48** and **55** are rejected under 35 U.S.C. 103(a) as being unpatentable over Keiichi et al. (JP-08,149,114) in view of Drott et al. (US 6,181,704) as applied to claim 22 above, and further in view of Yukie (JP-09,326,783).

a) Regarding to Claim **23**: Both Keiichi et al. and Drott et al. fail to teach a step of Yukie did not clearly disclose when a failure is detected, changes one of plurality of mode flags storing the primary mode therein to a secondary mode, and changes another of said plurality of mode flags storing a secondary mode therein to a primary

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mode. Yukie teaches such a step (see the discussion on Claims 18-20 above).

Therefore, it would have been obvious to one of ordinary skilled in the art to implement such a step of Keiichi et al., as taught by Yukie for message recovering and controlling packet flow over a plurality of communications links.

b) Regarding to Claim **25**: The claimed limitations of this claim are the same as the first two parts of the claim 23 (monitoring ---- primary mode). Therefore, the rejection of the claim 23 would apply to the claim 25 in a packet receiving method as taught.

c) Regarding to Claim **48**: The rejection of Claim 23 would apply to the claim 48 in a computer data signal embodied in transmission medium comprising the code as taught.

d) Regarding to Claim **55**: Basically, the claimed limitations of the claim 23 are the same as that of the claim 55, except for a computer readable storage medium for holding codes. However, this exception is well known in the art of the invention. Therefore, the rejection of Claim 23 would apply to the claim 55 in a computer program product for transmitting packets comprising the code as taught

Claim Rejections - 35 USC § 103

24. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skilled in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

25. Claims **30-34** and **35-39** are rejected under 35 U.S.C. 103(a) as being unpatentable over Yukie (JP-09,326,783) in view of Krishna et al. (US 6,330,248).

a) Regarding to Claims **30-34**, Yukie fails to teach a Frame Check Sequence (FCS) value of such as an Ethernet frame, an IEEE 802.3 frame, an IEEE 802.5 Token Ring Frame, and an ANSI frame; and a CRC value of an Ethernet frame. Krishna et al. disclose such a FCS and CRC (see col.1 lines 20-44; col.3 line 49 – col.6 line 23). Therefore, it would have been obvious to one of ordinary skilled in the art to implement such a FCS and CRC of Yukie as taught by Krishna et al, so that two stations can simultaneously transmit and receive data packets between each other without collision.

b) Regarding to Claims **35-39**: These claims are dependent to Claim 8 and the rejection of the Claim 8 was discussed above. The rest of the claimed limitations of the claims 35-39 are the same as that of the Claims 30-34 as discussed above in an apparatus for receiving packets as taught.

Citation of Relevant Prior Art

26. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The Patent number of the prior art listed below is considered as citation of relevant prior art in the field of the invention relates to line aggregating techniques and packet transmitting/receiving techniques for providing improved communications availability: Venters et al. (US 6,466,582); Kurdzo et al. (US 5,469,434); Chapman et al. (US 6,628,609); Schuster et al. (US 6,625,119); and Gable et al. (US 4,550,402).

Examiner Information

27. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony T. Ton whose telephone number is 703-305-8956. The examiner can normally be reached on Monday-Friday from 8:00 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas W Olms, can be reached on (703) 305-4703. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

ATT



**KENNETH VANDERPUYE
PRIMARY EXAMINER**